The dancing bears of India



by Geeta Seshamani & Kartick Satyanarayan August 1997



Contents

Preface

Objectives of the study

Methods and Material

- 1. Introduction North India (States of Uttar Pradesh, Haryana, Rajasthan and Delhi.)
- 1.1 Geography
- 1.2 Climate
- 1.3 Population

2. Introduction - South India (State of Karnataka.)

- 2.1 Geography
- 2.2 Climate
- 2.3 Population

3. Bear Species found in India

- 3.1 The Brown Bear
- 3.2 The Himalayan Black Bear
- 3.3 The Sloth Bear

4. Community: Kalandar

- 4.1 Socio-Economic status
- 4.2 Origin and sub-divisions
- 4.3 Alternative employment avenues
- 4.4 Community life
- 4.5 Village structure and habitat
- 4.6 Role of the Dancing Bear in the Kalandar economy.

5. Bear Dancing: Historical background

- 5.1 The myth of the bear and its powers.
- 5.2 The attitude / reactions of
 - a) Rural audience
 - b) City audience
 - c) Tourists to the Dancing bear performances.

6. Rearing and Maintenance of the Bear cub

- 6.1 Ownership
- 6.2 Maintenance and feeding.
- 6.3 Nose Piercing
- 6.4 Removal of teeth.
- 6.5 Trimming of Claws.
- 6.6 Diseases and Treatment.
- 6.7 Mortality rates

7. Training of the Bear cub

- 7.1 Training methods.
- 7.2 Injuries and Death.

8. The Dancing Bear on the road

- 8.1 Physical Hazards during road performances to bear and owner
- 8.2 Routes taken

9. Licensing and the law

- 9.1 Wildlife Protection Act, 1972, (with amendments)
- 9.2 State Laws: Municipality / forest officer / police.
- 9.3 Confrontation between Bear owner and the law.

10. Bear Cub Capture

- 10.1 Methods
- 10.2 Sources / Locations
- 10.3 Transportation/ Estimated number of cubs
- 10.4 Reselling and trading
- 10.5 The Bear Markets.
- 10.2 Local Attitudes towards Bear cub poaching
- 10.7 Impact of Poaching on the wild Sloth Bear population
- 10.8 Reasons for Easy poaching

Conclusion

Recommendations

NOTE: All information regarding the location of Bear villages and Markets, as well as the names of Bear Owners, Traders, and Poachers have been withheld to safeguard the investigators.

Preface

Western Conservationists focused on the Asian Bear Trade during the last twenty years when the demand for Bear Gall bladders reached obscenely high figures and bear populations were threatened world wide. However there has also been a new and growing concern on the national and international levels, at the use of the bear in blood sports, such as the Bear baiting events in Pakistan, or for entertainment, as in the travelling menageries and circuses throughout India, and for use as dancing bears. This project was undertaken to collect accurate and factual first hand information on the situation of the Indian dancing bear, the process by which it is captured / poached, together with its condition as it is transported and as it changes hands till it reaches the community that uses it for dancing. The report also studies the socio-economic condition of the community that uses the dancing bear and records its treatment, maintenance, training, and upkeep while in captivity.

This investigation revealed that the dancing bear suffers injuries and trauma throughout its life, but the first two years are particularly cruel and torturous for the captured bear cub. The actual capture and transportation can often be over hundreds of miles, in conditions of deprivation and dirt, and consequently there is a high mortality rate. During its first year it undergoes two or more nose piercings and a removal of the Canine teeth in a manner that is barbaric and primitive. The training that follows has as its keywords: pain and fear. The rest of its life as a dancing bear is made difficult by the fact it changes hands very often and is danced in a vast variety of climates and terrain's. It has an unnatural and deprived diet and spends much of its life tethered to a short three or four feet rope.

The actual hunting and poaching of the bear cub not only causes a decline in the bear population in the wild but also encourages the steady destruction of the eco-system and its habitat in India, and in fact leads to ever increasing deadly encounters between bear and man in the wild, which has not yet been fully documented, but we are certain it has a role to play in the increasing sloth bear aggression. Plantation development, timber extraction, collection of honey, the mahua leaves and flowers, expansion of local farms, commercial projects, intrusion by cattle, all reduce the Sloth Bears natural habitat. Currently the Wildlife Institute of India, Dehradun, has initiated a project to study the increase in Sloth bear - Man conflict in Central India, in an area that we have identified during our investigation as being one of heavy poaching and human intrusion.

Throughout our preliminary investigations the authorities denied any methodical poaching / hunting of bear cubs is taking place in the protected forest areas. They feel any orphaned cub "found in the forest / market place" is "incidental"; the death of the mother being "accidental". Similarly the authorities claim the bears in Zoos (legal captivity so to say) numbering on an average 150 sloth bears and 166 Himalayan black bears are all the result of breeding bears in captivity; they have no knowledge of cubs being orphaned / captured in the

wild and consequently given to the zoos / travelling menageries.

So too no documented data was available of how many dancing bears there could be with the Kalandars within a well identified area, even along well marked and oft-frequented tourist routes such as we covered or deeper in more inaccessible rural areas. There was no record of the Kalandar villages nor any data available of the number of bear cubs which seemingly entered the villages to be redistributed amongst the Kalandars. The authorities, by and large, felt a "fuss" was being made over this relatively harmless method of earning a living. In conclusion very little has been researched in India about bears, particularly the sloth bear, both in the wild and in captivity. Dr A.J.T. John Singh and his research scholar, Mr Yogi, (Wildlife Institute, Dehradun,) are currently conducting a Bear Collaring project in Madhya Pradesh and Dr. N.P.S. Chauhan (Wildlife Institute, Dehradun,) has a project on the Sloth Bear - Man conflict in Central India. However as these projects are still in process, data is not yet available for this study. In short no Conservation management programmes have been initiated for the Sloth Bear in India.

Objectives

The investigators were concerned:

- To establish the number of bears actually being owned / handled by a specific group, thereby allowing us to estimate the number of dancing bears in captivity in eight states of India.
- To assess the number of Kalandhar settlements in existence, their location in these states, rough population counts, and how many people still depended on the dancing bear for sustenance.
- To study the dancing bear in relation to its owner / trainer, by observing it in the villages where it is kept in domestic surroundings, by recording its behaviour, diet, and habits in captivity, and to determine areas of deprivation, active cruelty and ill treatment; both during the training process and during its life as a dancing bear.
- To understand the socio-economic conditions of the bear owner / trainer, their reasons for being in this profession, whether they are open to any mode of rehabilitation and could be encouraged to give up this trade / means of earning a livelihood.
- To study the history of bear dancing in India and the myths and stories that surround the bear in Indian villages and small towns. To assess the importance and relationship of the bear to the other animals used by the Kalandar for his living.

- To find out the source of the bear cubs, the process of capturing and selling the bear cubs; the extent of injury, death and trauma to the animals involved. To investigate methods of transportation and trade.
- To investigate the impact of cub capture on the wild population of bear species and the increasing confrontation between the bear and man in the wild. To investigate any possible links between this trade and other peripheral trades for pelts or bear parts.
- To study the efficacy of state and national Laws as they exist on paper and as they are actually implemented, regarding the poaching of the cubs, the method of licensing which permits purchase, transportation and the dancing of the cubs.
- To suggest methods of controlling this profession, preventing the entry of new cubs into the market, and providing plans for rehabilitation keeping in mind the fate of the bear and its owner / trainer.

Methods and materials

Separate questionnaires for the hunters / traders, and bear owners / trainers were devised. The questionnaires were administered face to face using the native language Hindustani with adequate Urdu words to put the interviewee at ease, in North India. In Karnataka, Kannada and Hindi were used. The investigators also interviewed a cross section of concerned people; those who owned a bear at present, those who have owned bears in the past but may not have a bear now; those involved in training and dancing, medicating and treating the animals, and those who pierce the nose, cut the claws and pull out the teeth. The investigators also observed the bear being danced in villages, along the tourist routes and while at rest in their homes. They interviewed the audiences, Indian and foreign, rural and city, and discussed the implications of trapping cubs with them. Their attitudes to the training and dancing of the bear was assessed. The investigators also interviewed Adivasis and the tribals actively involved in the hunting and poaching; as also those who did the buying and selling and transporting and witnessed several such transactions. Various officials connected with the Zoo Conservation projects, Wild Life and the Forest Department were interviewed, along with forest rangers and guards.

With the assistance of the Kalandhars, the clan that has been training and dancing bears traditionally for over 300 - 400 years in India, a route was set up "mapping" 29 villages belonging to their clan in four North Indian states, namely Rajasthan, Uttar Pradesh, Haryana, and Delhi. A map showing the route is appended in the Appendices. Similarly a

route was set up "mapping" 7 villages belonging to the Kalandars in Karnataka, South India. These 36 villages were visited by the investigators and 146 questionnaires were administered in their huts where the interaction of man and bear could also be observed; over 40 more people were questioned, and a large quantity of descriptive data was collected from the discussions that ensued.

The North Indian villages visited during this investigation were selected keeping in mind the homogeneity and cohesiveness of the clan; the fact that they marry, settle, and bring up their families within this circle, and although the Kalandhars have migrated to other States of Karnataka, Gujarat and Maharashtra, this particular sub-group in North India has kept to itself. Some of these settlements are also often very old and well established. The investigators set up one route through Karnataka where the Kalandar community has established itself only over the last 40-50 years, in order to compare and contrast any changes in handling, diet, treatment of the captive animal, and to discover new sources for the supply of bear cubs, new trading centres/markets, or information on other settlements of Kalandhars in South India.

While in Phase I of the project the Kalandar villages were visited, in Phase II the investigators accompanied the Kalandar purchasers on a cub-purchasing trip and administered questionnaires to the traders and hunters. A route was set up with the assistance of the Kalandars and modes of capture and transportation were studied, along with a study of the prices the cubs commanded from source to their final destination. The mortality rates during capture, transportation and consequent changes of owners, was also studied, along with an analysis on why the average villager is indifferent to the capture of these cubs; and why the authorities find it difficult to apprehend the poacher and trader.

Introduction - North India

(States of Uttar Pradesh, Haryana, Rajasthan & Delhi)

1.1 Geography

These four States stretch across the North West through the centre of the Indian subcontinent, with the Great Thar desert marking it at the western end, with relatively easy access to Pakistan. The forest covered foothills and mountains of the Himalayas border these States in the North and the thick forest ranges of Madhya Pradesh fringe the Southern end. The mountainous state of Nepal shares its borders with Uttar Pradesh and towards the eastern end lies Bihar with easy access to Bangla Desh.

Nearly 60% of Uttar Pradesh is mountainous, the rest, lowlands, which are a part of the Indogangetic plains. Rajasthan is 60% scrubland and desert, with the Aravalli ranges dominating the South-Western half and the ravines of Chambal occupying the South-East. Haryana is divided into the sub-Himalayan terrain and fertile Indo-gangetic plains. Only the South-West of Haryana is dry, sandy, and barren. Delhi has completely lost its forest cover and the surrounding villages, which till five years ago were a continuum with Haryana's green agricultural belt. These have been appropriated for construction of farm houses, factories and building complexes.

1.2 Climate

The climate varies considerably through this terrain although all these States share extremes of heat and cold. Rajasthan has a general arid desert climate with scanty rainfall during the northern monsoons and some of the dry regions receive less than 100mm annually. Haryana has extremely cold winters and extremely hot dry summers, with two well marked seasons of rainfall from June to September and December to February. Delhi has extreme heat and cold with scanty rainfall and a polluted smog ridden pall hangs over it throughout the year. Uttar Pradesh has a range of temperatures with extreme freezing colds during most of the year in the mountains of Kumaon and Garhwal, and moist heat in the plains, along the Ganges. The Northern Monsoon ensures heavy rainfall throughout during the months of July, August and September.

1.3 Population

The population in Uttar Pradesh was estimated in 1991 as 139.1 million and it ranks first in density of population with density averages that exceeds 470 km2 in places. Distribution of the population is determined by the topography, the mountains being sparsely populated, and the concentration being on the major cities of the state as well as along the Ganges. A State as large as Rajasthan has less population than Delhi or Uttar Pradesh being only 44 million with density averages of 129 km2. Delhi has 11.4 million with a density average of 6,195 km2; and Haryana has 16.5 million with a density count of 372 km2, according to census estimates in 1991. In Uttar Pradesh the rural population is 65% while the urban population has boomed to

an insupportable 35%, while in Rajasthan 80% of the population is rural and only 20% is urban. In Haryana 75% of the population is rural and 25% concentration is in cities; while in Delhi urban population is 90%. The Literacy rates also vary with 44% literacy in U.P. and 38% in Rajasthan, while Haryana has a 56% literacy rate and Delhi 77%.

Introduction - South India

(State of Karnataka)

1.1 Geography:

Karnataka is the eighth largest state in India both in area and population. Situated on the western edge of the Deccan Plateau, the Arabian Sea flanks it on the west. The States of Maharashtra and Goa are its neighbours on the North, with Tamilnadu and Kerala in the South. Physiographically Karnataka is a coastal region with large plains, irrigated by a large number of rivers and with a relatively thick forest cover. The Bandipur, Wynad and Nagerhole sanctuaries have recently been threatened by large scale timber operations and poaching activities.

1.2 Climate:

The climate is mild sub-tropical, and because of the elevation of the entire state along the Deccan plateau it has no noticeable extremes of hot or cold. Humid along the coast it receives heavy monsoon rains from June to September and lighter rains in December.

1.3 Population:

It's population of 44 million (1991 census) is spread out over an area of 191 sq.km. with a density of 234 persons per km2. The urban population is 31% but the economy continues to be mainly agrarian. The literacy rate is 56%.

Bear species found in India

2.1 Himalayan Brown Bear: Ursus arctos Linnacus, 1758;

(In Kalandar language the Sunhera Bhalu)

Description: Himalayan brown bears are variable in colour and generally appear a sandy or reddish-brown from a distance. Their pelage is long and tends to be matted with dense underwool. The ears are small and rounded and the lips are noticeably protrusible and mobile. The second pre-molar is generally absent. The females are smaller and lighter in build. Adult males vary from 1.5m up to 2.2m in body length, while females vary from 1.37m to 1.83m. The tail in adult specimens is approximately 7.6cm long.

Biology: Brown bears feed on insects, small crustaceans, alpine bulbs and roots of plants, shoots of young grasses, domestic goats, sheep, and voles (Alticola species). Brown bears feed actively from 1-2 hours before sunrise and again for several hours in the late afternoon and evening. They are nocturnal, and their sense of smell is acutely developed and believed to be their principal means of finding food.

Adult bears normally go into hibernation at the end of October and emerge around the following March or April. They excavate their own hibernating lair or den under a large boulder or between the roots of a stunted tree, or they may utilise a natural cavern. Hibernation appears to be intermittent, with the animal occasionally waking up and becoming active.

Mating occurs in the spring and early summer, and the females give birth to cubs during their winter hibernation. The gestation period is from 180-250 days. The cubs, generally two in number, are blind and weigh no more than one pound at birth. They are covered with short, silky, rather dark brown hair. Born in January, the cubs stay in the lair with their mother until she first emerges from hibernation in late April, and will remain with their mother for two to three years. Females are believed to breed first at the age of five years.

Distribution and Status: The Himalayan brown bear is generally restricted to alpine meadow and sub-alpine scrub zones above the tree-line in the northern mountain regions of India having Dachigam and Kashmir as its limits. The brown bear is uncommon in India and is considered rare. According to Dr. A.J.T. Singh, (Wildlife Institute of India, letter to Servheen,1988,) the brown bear was sighted just twice during a 9 month Snow Leopard survey in the Jammu and Kashmir States. Hence status of population is unknown. International trade in these bears, or their parts, is banned under CITES (Convention on International Trade in Endangered Species) and by the Wildlife Protection Act in India.

2.2 Asiatic Black Bear: Selenarctos thibetanus G. Cuvier, 1823.

(Himalayan Black Bear) (In Kalandar language Kocheela Reech)

Description: The Himalayan black bear has dense, shiny, black fur. However, there is no under-wool in this species. They have a ruff of extra-long coarse hairs on the cheeks and on each side of the neck. There is a conspicuous creamy yellow V extending from the sternum up to the armpits (axillae of fore limbs). The rest of the body is jet black, except for the muzzle which is reddish brown. There are four pre-molars present in the upper jaw. The round ears are set wide apart on the crown with the tips bearing quite a long fringe of hair. The claws on the fore-feet are horny and black in colour. They are shorter, more sharply curved, and are better adapted to different food preferences and to assist in tree climbing. The tail is just a stump measuring from 75-100mm. The fore-paws tend to be turned inwards when walking and are very powerfully developed. Males grow larger in size than females. An adult male may measure up to 1.80m in length. Adult females are about 30cm shorter.

Biology: Himalayan black bears climb trees freely, and are fond of acorns from the Hollyhock (Quercus balut) and Quercus dilatata. They feed extensively on mulberries (Morus alba) and apricots, rose hips (Rosa webbiana), insects and small crustacea, mushrooms, grass, and goat or sheep carrion. They have an uncertain temper and are likely to attack human beings if suddenly disturbed. The Himalayan black bears also feed on fruits of Ber (Zizyphus Russian Olive nummularia), and on lizards and insects.

Mating is believed to take place in October with the young being born in February while the female is still hibernating in her winter lair. Two young are produced which are very small and blind at birth. They stay with their mother throughout the summer and the next two years. The Himalayan black bear generally goes into hibernation in winter. The other Asiatic black bears do not always undergo prolonged or deep hibernation and will emerge to forage even during the winter months. When fighting or attacking, these bears make swipes with their fore paws and can inflict terrible injuries with their claws. Their sense of smell is acutely developed and is largely relied upon in detecting food or danger. If they encounter a human or any suspicious object they generally approach closer in order to pick up and identify the scent.

Distribution and status: The habitat of the Himalayan black bear is Himalayan moist, temperate forests, and it does not ascend above the permanent tree-line into alpine regions. The Himalayan black bear and its sub-species are protected by The Wildlife Protection Act in India. However according to Dr A.J.T. Johnsingh (Wildlife Institute of India, letter to Servheen, 1988) sightings of the Himalayan Black Bear are common only in the Dachigam National Park, in Jammu and Kashmir State, and according to Dr. B. Bhushan (letter to Servheen , 1988) the Himalayan Black Bear was reported seen from only 2 of the 67 national parks and sanctuaries. This lends credence then to the doubts entertained by Traffic

International, that the huge quantities of gall bladders supplied from India may be from the Sloth bear, and not from the Himalayan Black Bear, since their numbers are so low.

2.3 The Sloth Bear - Melursus Ursinus

(The Kalandars simply call it Reech)

Description: The average height at the shoulders is 2'2" to 2'9". The average length is 4'6" to 5'6". Males grow larger in size than females and a male up on its hind legs can measure 5'-6'. The weight varies between 128 -145 kg in males and 85 -110 kg in females. The Sloth Bear has a shaggy and long-haired rough coat, which prevents angry ants and termites from reaching its skin. The long coat keeps it warm for like other ant-eating mammals it has a low metabolic rate. It has a mobile and relatively long snout. It has a yellow or white V extending from the sternum to the armpits, not as broad or conspicuous as the Himalayan Black Bear's. The species peculiar appearance is related to its feeding habits, to the fact it is "myrmecophagous", in other words it eats ants and termites. (David Garshelis, George Nobbe, Wildlife Conservation) . The Sloth Bear's three inch ivory coloured claws are eminently suitable for digging up beetles and termite nests. Its loose lips and long snout, together with a concave palate, gives the animal extra sucking power. Its front two upper incisors are missing allowing it to draw in insects through the gap.

To prevent ingesting dirt along with the ants the bear pushes against the hole it has dug, closing the flaps of its nose pad before sucking its meal. This is also responsible for the hoarse sucking snuffle it makes. On each of the forepaws is an extended pad on the outside, which allows it to grasp things better and scale trees when it is after honey from the bee hives. Sloth Bears annually range in a smaller area than other bears; typically a female will range about 3 miles and males about four to five miles, (Dr. Anup Joshi, Chitwan Sanctuary, Interview with George Nobbe, Wildlife Conservation). However Dr, Vasanthi Iswariah in a study of sloth bears in Karnataka, 1985, speaks of the bears ranging between ten and fifteen kilometers in one night for food. While the Himalayan Black Bear hibernates in winter the Sloth Bear does not need to and is merely a little lethargic which suits the Kalandar very well. The Sloth bear is almost nocturnal in its habits due to the pressures of human habitation inside protected forest areas and sanctuaries.

Biology: Much of its diet consists of fruits, such as the Ber, Jambul, bael, Banyan wild figs, lantana, jackfruit, mangoes, mahua and mulberries. Its main insect foods are ants and termites, large dung beetles and longicorn beetles. Attracted to corn, sugarcane, maize and date palms, they may raid farmers' crops making them the target of the farmer's ire. Cases have been recorded of their addiction to toddy and country liquor in Orissa and Himachal Pradesh. Although by and large Dr Anup Joshi records in the article mentioned earlier, the Sloth bear avoids going near man and his settlements, throughout the Indian States there are growing reports of violent confrontations between villagers and the Sloth bear, with attacks on cattle

and women, (Dr Shankar, Wildlife Institute of India, Dehradun). Dr. Vasanthi Iswariah in a study of Sloth bears in Karnataka, 1984, also highlights the increasing frequency of attacks by bears on villagers because of degraded habitat which sends the bears into the sugarcane and groundnut crops.

Mating takes place in the hot season which varies in the different States between April to August. The gestation period is approximately 6 months and the cubs are born anywhere between late November and end February so that the cubs are caught by the trappers / hunters approximately from end-December to end February and reach the bear cub markets around this period. Sloth bears rarely have more than two cubs and often spend up to two years caring for them. They are extremely possessive and angry mothers and will go right up to trappers / hunters and confront them, while trying fiercely to protect their young (Dr Anup Joshi, Chitwan National Park, interview with George Nobbe, Wildlife Conservation). In the 146 Kalandar questionnaires administered by the investigators, to the question what was the chief danger in capturing the cubs, the Kalandar responded (98%): the ferocity of the defending mother bear.

David Garshelis, (interviewed by George Nobbe in "The Shaggy Bear", Wildlife Conservation, 1990,) points out the Sloth Bear is more susceptible to over-exploitation because it has a low reproductive rate, reaching sexual maturity relatively later than other bears. Hence this relentless trapping of the cubs, sometimes involving the killing of the mother bear, does not portend any good for its future. Their average life in the wild is between 30 - 35 years but in captivity according to most authorities they could average 20 years. However our questionnaires revealed that more than 60% of the bears were less than ten years old; and another 30% were between the ages 10 and 14 years old; and only 10% were above 15 years old. We found no bear above that age. Hence the age and life expectancy of the captive dancing bear is perhaps a lot shorter than previously conjectured.

Distribution and Status: The Sloth Bear once ranged through all the forests of the Indian sub-continent, South of the Himalayas. It was possible to find them in all the States of India and in almost all the sanctuaries and national parks. The central, tropical, deciduous forests appear to be its optimal habitat, as in Karnataka, Madhya Pradesh and parts of Orissa, and also the once heavily forested border between Nepal and India. Wildlife Sanctuaries and National Parks still report the presence of sloth bears, albeit in decreased numbers.

In 1989 it was proposed to CITES to put the Sloth Bear on the Appendix I List. It appears as a Schedule I animal in the Wildlife Protection Act, 1972, of India. In a 1982 "survey" of unknown authorship cited in the New York Times, 5 July 1988, and quoted by Servheen in a paper entitled "The Status and Conservation of the Bears of the World", presented in 1989 at a conference on Bear Research and Management, Canada, it is conjectured that over 10,000 sloth bears still exist in India. However the information currently available on numbers and distribution is highly debated. Indian Wildlife government officials and the Forest departments typically deny any large scale poaching or capturing; and insist the Sloth bear's gall bladder is "of no value" hence it does not feature in the trade of bear parts. Consequently they put the numbers of sloth bears in the wild quite high, almost double that figure.

However according to Wildlife researchers working on other projects, circumstances such as habitat alteration, forest-cover destruction, encroaching industries and towns, the intrusions by villagers into forest reserves, have decreased their numbers rapidly. Hence they hold, a more conservative and lower figure of approximately 8,000 sloth bears, would be more accurate. Richard C. Jaffeson, Senior Environmental planner, Maryland, has been studying the Sloth Bear since 1975, and at a meeting of American Geographers in April 1976, he concluded in his paper, that "8,500 to 7,300 Sloth bears (estimated) in India and Sri Lanka; population trends towards the thinly distributed with a range density index of one Sloth Bear per 6.4 square miles." He pointed out that India's forested covers were fast decreasing and that unless additional conservation measures were brought about the Sloth Bear would suffer due to "increasing habitat encroachment" and Servheen in the paper quoted above, adds due to "population insularisation. "

Trade in any part of the Sloth Bear is forbidden by national laws in India. However Traffic Japan, a branch of WWF, reported 681 kg of dried sloth bear gall bladders entered Japan from India between 1978 to 1988. The bladders were used for traditional medicine to cure liver, stomach, and intestinal complaints. According to this report, quoted again by Servheen, (1988,) the import was from India via Singapore.

Servheen concludes if one takes the mean average weight of each gall bladder to be 85gms then this figure represents approximately 8,011 dead bears to 12,000 dead bears over a ten year period. In other words, he concludes, annually at least 728 to 1500 sloth bears are killed.(Status and Conservation of World bears, Servheen p7, 1988.) Similarly in a Traffic Network Report, "The Bear Facts", edited by J.A. Mills et al, South Korea imported bear bile during 1970-1993 to the tune of 4,136 kg, and India ranks third on the list of twenty two suppliers. Obviously this is in contravention of CITES and although it is illegal to export bear parts, and bears are protected by Indian Wildlife laws, the trade continues.

The status of the sloth bear therefore has been extremely difficult to pin down because of the lack of information about the bear, both in the wild and in captivity. The researchers, through the questionnaire administered to the Kalandars, have tried to estimate the number of new cubs entering the villages studied (altogether 36) and the number that enter the markets / trading points visited (altogether 11) in one season. The statistics arrived at are largely based on descriptive data volunteered by the Kalandars, the traders and poachers, and the investigators own factual verification / observations.

4. Community: Kalandar.

4.1 Socio-Economic Status:

The Kalandars belong to the OBC category i.e. they are included in the category of OTHER BACKWARD TRIBES by the Government of India, along with the Adivasis, forest tribals, and all those communities which make their living from the forest and its resources, or work with animals as entertainers. It implies the government has recognised their economically deprived status and that they have in a way become displaced in the present development of this country and special assistance is to be rendered to them through government schemes. However the government has failed to plan any schemes of housing or land ownership, nor provided this community with employment or even the basic necessities of clean water, sanitation, and simple medical aid and primary education. The Kalandars by and large have not bothered to register themselves with the Government offices because of their lack of faith in the government's commitment to give them their "rights". However this attitude is changing and over the one and a half years of the investigators interaction with this community, a new aggressiveness has permeated them, significantly co-joined to their belief that the old traditional methods of earning will not suffice and they need to find new sources of employment and sustenance. Any rehabilitation scheme stands a good chance of success because of the current economic stresses and deprivations of the Kalandar community.

4.2 Origins and Sub - Divisions:

The Kalandar Community were originally Muslim gypsies with a highly nomadic life style, moving from place to place with their tents and animals. They earned a living from a large number of performing animals, for example, monkeys, bears, fighting roosters and pigeons, and kept others as pets to display to their audience such as civet cats, owls, falcons, and partridges. This mastery over animals created an appropriate awe when they tried to sell medicines and talismans as cures for illnesses, or tried to hold their audiences' attention during the performance of magic tricks and acrobatic stunts. To a large extent the Kalandars of Karnataka still keep to this highly nomadic life and we found they moved every few days to a new camping ground, often walking 20-30 miles a day, moving far more frequently than their Northern counterparts. They still use light tents to live in, cook in the open and carry their poultry and goats and other animals with them as they move from village to village. By contrast the Northern Kalandar prefers to move between his own settlements and kith and kin even when on the road.

Over the years the Kalandar community became more stratified and those dancing the monkeys came to be called "madaris". They mastered the art of playing the tabla like instrument called the "Damru" and exclusively danced the monkeys in the village or town. Yet another category was that of the "Bazigars" who fascinated the crowds with their rope climbing, trapeze walking and gymnastics. The "Katputlis" made puppets and performed puppet shows. The "Jadugars" performed only magic tricks depending on the sleight of hand

and never used any animal during their performance.

The Kalandar who owned, trained and danced bears considers himself to be the true "Masth Kalandar". They are still given a great deal of respect in the village as their potential to earn is considered to be more, as well as the bear ranks higher as an animal of mystique and worth than the other animals reared by this community. Each community used to maintain its separate identities, and never interchanged professions, or intermarried, or shared work or festivities with each other. However this has begun to change and our survey showed many bear owners had, over the last five years, sought alternate means of employment to earn a living, thus blurring these so called "caste" distinctions.

4.3 Alternative Employment Avenues:

Over the last 5-8 years, many of the bear-dancing Kalandars have only been able to afford monkeys and dance them for a livelihood. So too many of the Kalandars have moved over to magic tricks, card, rope and handkerchief tricks, to earn a living, as the use of an animal in their performances brought them more police and municipality harassment than earnings. So too while Kalandar families still insist one family member dance a bear, since it has been the family profession for several generations, other family members take up jobs outside the village although they stay in close touch with their community.

Many of them work today as unskilled labour on factory and housing sites, others weave baskets of bamboo, or make metal wire bird cages, or work as scrap dealers and in workshops repairing vessels and buckets. In one village the Kalandars had begun small businesses in semi-precious stones, making astrological rings and lockets, talismans and amulets. In several villages the Kalandars had hired handcarts for which they paid a rental of Rs20 per month and eked out a living selling seasonal vegetables and fruits. Yet others have become truck drivers or apprenticed themselves as mechanics at motor repair shops. It is significant that in the last 5-10 years the preferred method of safely transporting cubs purchased at bear markets and near "Dangs" or forests has been through friendly truck drivers, according to the Kalandars, and this friendly network also facilitates their travelling through North India and Karnataka, and allows them to dance their bears in far-off cities of Jammu and Kashmir, Nepal and the North-East.

4.4 Community Life:

The Kalandars spend most of their time eking out a precarious livelihood and rearing large families, on an average consisting of 10 - 12 members. They have a tight network of social and marital relationships and the villages we visited were held together with bonds of marriage and kinship. Their loyalty to one of their clan surpasses all fear of laws or the government. Initially they suspect any member from the outside world and are slow to give respect or trust to outsiders. Their society is democratic and lives by simple rules. They elect a Panch or Choudhary and he represents them in all meetings of the Panchayat, where all the heads of

the villages gather to sort out quarrels or problems.

Each village thus sent its Panch to give their point of view in any clan gathering or Panchayat, such as the large meeting we attended on 4/8/96 at BV4. At this meeting it was instructive to see the simple commonsense and fairness with which discussions were conducted and decisions arrived at by a simple consensus. All the heads of the 29 villages of North India that we were to visit were present. The investigators had to prove they could be trusted not to expose the entire ring of villages and endanger their livelihood, before we were allowed to continue. So too marriages and divorces are regulated through the panchayat, property disputes and all quarrels are settled through a meeting of the panchayat. A meeting can be convened rapidly through word of mouth using the network of buses and trucks on the highway. The decision of the panchayat is never challenged and any rebellion leads to social ostracism.

Some of the villages we visited dated as far back as 200 years on the outskirts of Kanpur and Lucknow while the ones at Agra claimed to be 250 years old. One of their largest settlements outside Jaipur was a mere 75 years old. A sense of history pervades and the village elders orally pass down the tales connected with the founding of their settlement. Thus the BV 7 contained 325 members of about 35-40 families, and they traced their settlement directly to the Kalandars of Panipat, and they came here 7 "Takiyas" (generations) ago. Four brothers migrated with their families and multiplied. The village is also famous for its wrestlers, such as Dada Darbari and Mallu Pahalwan, and its hunters, such as Makhan Roshan. They pride themselves on the strength of their mud houses and their roofs made of "sapera" (snake) grass. They had constructed a cement tank to hold water and hired a school teacher for Rs 400 a month to teach their children the Koran; this rated as "progress" in a Kalandar village. BV19 and BV24 were similarly traced to ancient grants of land by the mughal kings to their court entertainers. BV24 was founded 250 years ago by Wajid Ali Badshah and papers are still available with their Panch to prove this. The village had 1500 members of about 65-70 families. A few of the settlements such as BV12, BV20, BV5, BV30 were merely tents stretching out over a barren unoccupied field. In Karnataka only two such large well established settlements above 50 years old have been traced, with a population of over 750 members; and a total of about 65 "licensed" bears exist in the State. (Srinath, WWF, Bangalore.)

However very few of the Kalandars actually own their own land even in the older established villages, and their mud huts and tents grow up around one or two of the richer clan members who actually have papers to show land ownership, and who construct their houses on higher ground using stone or brick.

By and large the villages examined had only 20% permanent housing; 50% lived in mud houses which needed to be rebuilt after every monsoon, and 30% lived in tents made of

bamboos with tarpaulin or plastic sheets as roofing. Large parts of all the villages were underwater, and mosquitoes bred freely. Malaria, conjunctivitis and other eye infections, chronic malnutrition and potbellied rickety children was the norm in all the villages. Those close to the cities still did not seem to have any clinic or first aid centre near them. The further off the villages were from urban areas the cleaner and healthier were the inhabitants and their income / diet was more likely to be supplemented by goat and poultry reared by them.

By and large their villages have no sewage systems and no running water and only in two cases had they "borrowed" electricity from overhead wires. The passages between the homes were unpaved and under water. Only one village had a well with brackish water and one had a tank to store rain water in. The Kalandars had to request water from neighbouring settlements. By and large no medical aid was available for the people as well as the animals and they relied on themselves for treatment. All but three villages had a Madrasah near them where the children could learn the Koran but government schools providing secular education were close to only four villages. The girls are not educated or sent to school. Most of the older Kalandars above the age of 30 yrs had 2-3 years of religious education but no secular education. The younger generation often had 3-5 years in a government school but the high degree of unemployment amongst the youth (almost 95%) discouraged them from studying further. Amongst all the villages visited, only two Kalandars had done their Masters degree and after several years of futile search for government employment, one had begun his own welding unit, while another had become a "Hakim" or rural doctor. Five others had completed high school and were idle at home being now untrained for their traditional trades.

4.5 Village Structure and habitat:

A typical Kalandar village is well set back from the national highways or main roads and generally camouflaged by dense, thorny, tree growth or scrub. In urban areas it is usually hidden behind the worst slums or in the peripheries of the town, with the path leading to it being narrow and winding. Should a police raid be conducted this gives them time to exit, as the warning reaches them before the officers. Usually the village has a set of paths behind to assist such escapes with or without their animals. In BV29 on September 20, a raid was conducted by the DFO, Chandigarh, with 8 police officers. The other communities sympathise with the Kalandars, so warning reached them minutes before the officers. Twenty bears with their owners escaped by using the roofs of their houses as exit paths which led to a narrow path at the back of the settlement.

Their villages also use the dried branches of the Kikar tree, which has large thorns and heavy leafing, and droops close to the ground, as fencing between houses and to create enclosures for their bears. The bears are well hidden behind piled up dried scrub and kikar branches. Sometimes, as in BV13 ,where over 31 bears were examined by the investigators and the Kalandars often had upto 45 bears, large pits are dug among the low hanging kikars and the bears are safely staked in the pits. The curious passerby does not detect the pits; one only sees

level stretches of flat marshy land and heavy kikar growth. In BV1 the bears are simply kept in the chicken coops which are large woven baskets with a dia. of 4-5 feet and can easily accommodate bear cubs. One sees the hens pecking around and inside and only close investigation reveals a cub.

It is important to note that these techniques of camouflage are needed nearer the city of Delhi or the main cities of Haryana, Rajasthan and Punjab, where raids are common and harassment is expected. There has been an increase in this over the last five years according to the Kalandars. In most of rural Rajasthan and parts of Uttar Pradesh and Karnataka, states where the Kalandars are not troubled too much, the atmosphere is more relaxed and the bears are kept closer to the homes, in front yards, and on platforms in the central meeting place area, or comfortably reclining under trees and under the rope-strung charpoys of the owners, along with the goats, monkeys, partridges etc. Counting the bear stakes accompanied with the typical shallow depressions dug by the bear to make itself comfortable, became one way of checking on the number of bears in a village, although leeway has to be kept for the fact that the bears are made to change position 2-3 times during the day according to the position of the sun.

There is usually a clearing for village meetings next to the house of the Panch ; if there is a hand pump or well in that village, that too can be found here; and the entire area around each house is paved with a mixture of cow dung and mud that works as an antiseptic and hygienic flooring; even those who are in tents keep the interior clean by paving the floor with this mixture. Their cooking areas are outside the huts, so too the family cooking vessels are stored outside, large baked earthenware pitchers hold their store of drinking water, and large 3' feet high mud pitchers are made to store grain and rice. Cow dung pats and dry twigs and branches collected by the children constitute their fuel.

4.6 Role of the bear in Kalandar Economy:

Owning a bear definitely continues to be a source of pride and holds significance for the Kalandar. In spite of the fact that the cost of a bear cub under three months was anywhere between Rs 3000 and Rs 5000; the cost of a slightly older cub varied between Rs 6000 to Rs 8000; and the cost of a fully trained adult bear ranged between Rs 15000 to Rs 25000 there is still active buying and selling, despite signs of obvious poverty. The Kalandar claims to "borrow" this money and incur heavy debts to buy a bear but our questionnaires reveal a high percentage of trade between the Kalandar and the middlemen at the bear markets as well as between the Kalandars themselves, mainly because of the high mortality rate of the sloth bear in captivity, particularly in the first three years of its life.

Most of the Kalandars, about 83%, have been dancing bears in their family for 5-7 generations. However only 10% had visited the forests / capture areas to actually buy their bears and even less had witnessed the trapping process. These were significantly from the

older group of Kalandars, above 50 years of age. The younger generation confessed to not having any forest survival skills and no experience of witnessing the trapping of cubs done by the tribals.

A dancing Bear works on an average 6 hours a day according to the Kalandar, but on festivals, at village fairs and at marriages, or to celebrate the birth of a child, a dancing bear could spend 10 hours a day catering to the crowds. According to the Kalandar the bear becomes extremely irritable by evening and it is difficult to control without giving it, its evening meal. Thus they too prefer to give the bear some rest in the day and particularly during the evening after its feed.

The earnings from a bear average Rs 2000 to Rs 3000 per month during the good seasons which in North India are the winter months when foreign tourists visit and hotels and Kalakaar trusts arrange large shows. In BV4 for example five bears are on monthly employment with government hotels, 3-6 km away from their settlement, and they spend three hours in the morning and four to five hours in the evening, entertaining the hotel guests. So too BV10, BV13 and BV16 had as their chief income, large shows organised in major tourist cities by hotels, both private and government run. Their income falls to Rs 1000 to Rs 1500 per month when they have to rely on a rural audience. However the dancing bear owner relies heavily on his rural audience for donated rice, wheat and other lentils and seasonal vegetables.

5. Bear dancing: Historical background

5.1 The Myth of the Bear and its powers:

The Dancing bears date back, according to the Kalandars, to the 16th century. They claim to be the descendants of Multanis or Pakhtoons and claim to originate from the mountainous areas beyond Pakistan. Panipat and Dhimri were two of their oldest sites in India but today no Kalandar stays in those two places. They were richly patronised by the Rajput Kings and the Mughal emperors who enjoyed watching the bears dance and particularly liked wrestling events between men and bears. The villagers, irrespective of caste and religion, have since the beginning of the tradition, respected the Bear as the Protector of little children and a defence against spirits and ghosts.

The Kalandars use the religious text of the Ramayana to add to the mythical dimension of the bear. The Bear tribe assisted Lord Rama in his search for Sita when she was kidnapped by King Ravana. This reference gives the bear a special status and it is regarded as an animal of power and strength, one that can frighten away evil spirits, keep a child free of nightmares, cure certain psychological ailments, exorcise spirits from possessed individuals and grant blessings of good health and peace particularly to little children. Anyone wearing an amulet containing the hair of a bear or a bear claw, was protected from envy or "nazar" i.e. the evil eye. Therefore on birthdays, festivals, naming ceremonies of the child, or when a child has been ailing for a while and has not responded to medicines, the bearman is summoned with his bear. The child is put on the bear's back and walked around, or a hair of the bear is tied on him for protection, or a talisman with a claw is purchased.

5.2 The rural audiences:

by and large, were attracted to the dancing bear at a fair, or when it passes through their village because of this, and not the entertainment value of watching a bear dance on its hind legs. For the rural audience, even today, this aspect of the bear - its being able to cure illnesses and frighten off spirits - is by far more important than any tricks it can perform.

It is only the urban audience or the foreign tourist who wants to watch a bear "dance" or is entertained by its "tricks". Throughout the investigation, after observing almost 45 bears dance, we noted the dancing bear hardly ever "dances". It is trained to rise on its hind legs, sway its head from side to side, lie down on its back, give a paw in handshake, or sit.

There is not much variation on this except when a child or the owner "wrestles" with the bear. The "wrestling" consists of grappling with the bear and invariably the animal is trained to merely clasp the owner or child. Sometimes two bears or more will rise on their hind legs and with forepaws touching, move in a circle. Foreign tourists and children are fond of sitting astride the bear and "riding" it for a few minutes. In conclusion, the immediate cruelty or abuse of the animal does not lie in the actual "dancing", but in all the other aspects of the trade : for example, in the actual capturing, transporting and training process; in the fact that it spends long hours in heat, dust, and noise, waiting for clients / an audience to gather, and in an urban environment vehicular fumes and the pollution aggravate the dancing bear's distress and injure the bear's health considerably.

One typical method of earning is by standing along the well travelled tourist roads and highways. The bearmen stand in groups and flag down the cars passing by and put up a quick display of a few steps, collect a baksheesh for allowing photographs, and the tourist moves on. Typically in an hour they collect between Rs 50 and Rs 75. The rest of the time, while waiting for a client to stop, the bears are given a slack 8' to 9' of rope, which allows to them to dig for ants, beetles and termites under logs and bushes along the roads and thus supplement their diet. This happier state of affairs does not last for the Bear when it enters a city for dancing. The Kalandars admitted the bear has to be kept on a very short rope, to prevent any accidents to the audience, the bear's feeding is very irregular, and the bear is more stressed out due to the crowds pressing around him which the Kalandar admits unnerves the bear.

The various audiences were questioned by the investigators to assess public awareness of the trauma involved in this trade for the animal. 90% of the rural audience responded it was not cruel to the bear and some added it gave "pleasure" to the bear to be fed and petted by the crowds. The city audience were a little more aware and 73% felt it was not cruel to the bear to be danced but 27% felt the capture / training might be stressful for the bear. The foreign tourists, about 40%, felt the bear dance was cruel, that the bears looked tired or miserable, and 5% aggressively wanted the dancing bear banned; while 55% felt it added colour to Indian life; or it was "picturesque", or it was an art form perhaps to be kept alive. Both the urban audience and the foreign tourists interviewed felt in a country this "poor " the Bear man cannot be faulted for trying to earn a living whichever way he can.

6. Rearing and Maintenance of the Bear cub

6.1 Ownership:

Administration of the questionnaire revealed that 66% of the Kalandars presently dancing bears had actually reared it themselves from a cub. 30% had acquired semi-trained juvenile bears or already trained adults from fellow Kalandars, who sell at times of domestic crisis but usually always to a fellow Kalandar or through a middleman who is again a Kalandar. Only 4% on the questionnaire mentioned that they had sold a bear to a travelling circus because of its old age or to private collectors who wanted to keep it as a "pet".

The Kalandar felt it was optimal the bear cub be raised, fed, trained and danced by the owner himself, specially during the initial training period of 6 months to a year; the age of the cub being between 4 to 6 months when the training begins. However it is often not possible for the same member of the family to take the bear out for dancing / earning and several family members participated in dancing and walking the bear after the initial training period was over. Village elders are often asked to help in breaking in the cub.

At BV4, BV7 and BV8, three village elders who acted as trainers were interviewed. Only one of them still danced a bear. The other two had retired and helped train the cubs brought to their village. They received payment in cash or kind from the fellow Kalandar for this service.

The investigators found a direct relationship between the Kalandar's confidence in handling his bear and the age at which the bear cub had been acquired. If the Kalandar had single-handedly raised the cub as we found to be the case at one of the largest settlements, BV13, the bear does not suffer the same degree of abuse through the rest of its life.

The reasons are simple: the Kalandar does not then tie him down with a very short rope, or pull with unnecessary force on the dancing rope nor does he need intimidation with the stick or hitting with an iron chain; nor does he use hunger as a method of control throughout the bear's life. Being familiar with the cub's habits from the beginning, the family and the bear handler develop a better working relationship.

It is rare for a Kalandar to own more than one adult bear whether he intends to dance it or sell it a little later. Eight families were encountered that owned a cub and an adult or a juvenile and an adult; and only one family in the entire survey period owned four adult bears. In two cases a Kalandar took the bear for dancing in order to pay off a debt he owed the actual owner of the bear. We gathered this can happen quite often in the Kalandar community not because the actual bear owner is too rich and is "hiring" someone to dance his bear but because one kalandar owes the other money (borrowed during a domestic emergency) and this is one way the debt can be paid off.

6.2 Maintenance and feeding:

The bear cub usually reaches the village traumatised and dehydrated. Initially the cub is kept close to its owner in a basket or under a coop and brought out only for feeding. After a couple of weeks it is tied by a rope, to a bamboo pole, close to other cubs, and fed a wheat gruel along with its milk. The Kalandar claims to add jaggery to this feed to fatten the cub and win its confidence. It takes fifteen to twenty days the Kalandar claims for the new cubs to accept this relationship and begin eating well. The mortality rate can be high at this stage.

During one of visits the investigators released the cubs from the bamboo posts to observe their behaviour. They were playful and didn't stray far from where they were tied. Their play consisted of a variety of vocalisations as they indulged in mock attacks and wrestled with each other. But the Kalandars evinced no interest in leaving the cubs free to exercise themselves and to explore their surroundings. Considering the cub in the wild accompanies his mother and explores his world around this age, this continuous tethering of cubs by a short rope throughout the day and night is a cruelty difficult to evaluate or quantify. So too they are deprived of all the warmth, touch and company of an adult (mother) bear and it is no wonder the cubs are continuously mewling / whining and tugging at their ropes; or in desperation they go up and down the bamboo poles to which they find themselves tethered. They are left free only when they are opened for their feed.

The Kalandar claims feeding a cub costs between Rs 20 to Rs 30 per day and the costs rise steadily till the adult bear costs them between Rs75 and Rs 110 per day. Some Kalandars claim to feed Chana Ata, i.e. powdered gram with the milk to the cub, yet others claim to add soft fruits, but the investigators found no signs of this in any of the villages visited. By and large in North India milk and wheat porridge is fed to the cub; and in the South, Ragi porridge and milk is fed till the cub is about six months of age.

After six months of age the cub is fed twice a day, with large Rotis (baked breads made out of wheat flour) mixed in milk ,in North India. In South India they are fed steamed Ragi balls and milk twice a day. Twice a year when the season changes from hot to cold and cold to hot, the bear is fed several kilos of Ghee (clarified fat) about _ a kilo each morning for 7-8 days, which the Kalandar claims "deworms" it, "cleans its stomach" and prepares it for the change of season. To prepare the bear for the colder months in the North, similarly _ kg of jaggery (molasses) is fed to the bear each day, for about 8-10 days. This the Kalandar claims builds up the bears' resistance to infections, probably by building up the fatty deposits. Although the Kalandars are well aware of the natural diet of the bear there is no attempt at feeding the bears in a more balanced fashion; the Kalandar logic being the animal is no longer "wild" and has to be given a "human" diet,

The heaviest concentrations of dancing bears were in BV7 and BV13. Here the bears on an average recorded longer life spans; when physically examined they had glossier coats and

were larger in size and heavier. Significantly both the villages had large tracts of open space with plenty of trees and scrubby undergrowth with large termite mounds and ant hills and the bears had access to this. In these villages the bears were kept on long twenty feet ropes that allowed them to grub about in the soil for their favourite food. This addition to their diet significantly improved their health. Secondly these bear men were closer to the highways and could attract a large tourist trade; or earn by entertaining at hotels where a programme would be arranged for eg. at festivals. This was another factor which contributed to their better health, as undue stress while walking long distances was avoided. Thirdly most of the bears in these two villages had been reared as cubs by the same owner who was still dancing them or a member of the immediate family was handling them. The bears had not suffered frequent changes of owners / handlers. All these factors contributed to their better health and maintenance and the owners enjoyed a closer relationship with their animals.

By and large the bears were groomed meticulously by the Kalandars if the expected route to be taken was one frequented by foreign tourists or they had been given a contract by hotel proprietors to sit at fixed spots for their guests. Thus the bears of BV4, BV7 and BV8 and BV11 were even shampooed and combed, as tourists enjoyed physically stroking and handling the bears. When on the road or dancing before rural and small town Indian audiences the bears were often coated in mud and suffered cuts on their foot pads and suffered an unexplained eye discharge. The bears also walked longer distances, their feeding was often disrupted and rest timings became irregular and they were treated more roughly as rural audiences often teased and provoked the animal. So the Kalandar is extra vigilant to ensure that no member of the public gets scratched or attacked by his bear and he consequently treats his bear more abusively.

The staking of the bears when at rest varied. In 70% of the cases observed, the rope taken through the nose was attached to a chain/rope which could be as short as three or four feet. The position is one of acute discomfort and the bear cannot turn or stand up to sharpen its claws on a tree or lie at full length. In about 80% of the cases observed the bear had dug a shallow depression and rain water had filled it up, so that the bear stood defensively hunched up near its stake for long periods of time or curled up on the soggy ground resigned to its fate. Although the Kalandar claimed to change the bear's resting site thrice a day, we rarely found them that concerned. In some villages the bears are surrounded by cut branches of the thorny kikar tree which protects it from dogs and acts as camouflage from the idle, curious passerby.

6.3 Nose Piercing:

The cub suffers trauma when it is pushed and pulled by the children of the village in an attempt to break it in and get it used to being handled by men. However its first ordeal by pain is when the nose is pierced and a thick rope inserted through the cheek tissue and removed from its mouth. This is the first nose piercing when the rope and needle is pulled

through the top of the cheek and out through the mouth. A second nose piercing is done after another four months when the cub's snout is larger and the cartilage of the upper palate is stronger to withstand a thicker rope. This time the rope is pulled out through either the right or left nostril. Often the bear paws itself repeatedly or tugs at the rope in a bid to escape the pain and tears the inflamed tissues. In such cases the kalandar repeats the nose piercing at another site on the snout. It is quite common to see several scars on the snouts of the adult / juvenile bears.

Although the Kalandars in a few villages claimed to go to a veterinarian for the nose piercings and insisted local anesthesia was used and painkillers given after, this was a tutored reply given at the start of the investigation. In all the questionnaires administered after the investigators had won their trust, 96% replied the bear cub's nose was pierced by a village elder or an experienced owner in the village itself, with a large iron needle about 6.5 inches in length.

It was only in the second year of investigations that the researchers could witness the first nose piercing. The crude iron needle such as is used to sew mattresses and sackcloth, is heated in a coal fire and plunged in with a group of men holding the squealing cub tight. The site of the nose piercing was invariably infected in all the 17 cases we observed when the questionnaire was being administered. All cubs observed since then have also been found to have infected pus filled nose piercings with the muzzle swollen and distorted, sometimes up to four months after the first piercing. The cub would then have to suffer a second nose piercing before the first was healed, compounding his agony. It is significant that this is the optimal training period as the cub will walk and rear up on its hind legs mainly because of the agony it suffers when the rope is tugged.

No medication was being applied to the muzzle till the investigators donated antibiotic ointments and fly-repelling creams. The Kalandar puts "Sarsoo oil" to ease the pain and soften the tissues but it is a sweet oil and attracts flies. Although simple Ayurvedic indigenous ointments are available and can prevent infection, the Kalandar does not use this information, preferring to do what his forefathers always did.

In Karnataka a Brass ring was put into the nose of the bear and then a chain or a rope attached. This practice was only noticed in the bears examined in the South. If the measurement of the muzzle was done carelessly often the snout of the bear remained compressed and distorted as the ring was smaller than needed. Secondly a very cruel mode of control was to insert the bearman's stick into the ring and twist it a little, thereby causing the animal a great deal of pain; thirdly more than one rope can be attached to the brass ring, if the bear is of bad temperament and facilitate control of the bear.

Of the 97 adult bears the investigators examined, about 40% still had their original nose hole.

The others bore scars to show torn cartilage and large cuts, distorted muzzles, several openings in the nose indicating re-piercing. The trainers explained that a recalcitrant or ill tempered adult bear would have to be re-pierced in a bid to tame him with pain and control him. Others explained that simply with age and wear and tear, it becomes necessary to redo the holes. Only one percent of the interviewed Kalandars were willing to forego the nose piercing and experiment with using a leather muzzle and/or harness on the bear. No Kalandar was willing to accept that a bear could be controlled without a nose rope. They were however willing to learn the names of medicines that would lessen the infections.

6.4 Removal of the Canine teeth:

The cub has small black canines as part of its milk teeth and it is between the 8th and 10th month that the adult canines appear and are removed. This is done with no anesthesia and again an iron rod is hammered in, with a blunt wooden pestle, and the tooth dislodged with force. The use of a pliers - like instrument, resembling kitchen tongs made of iron, is sometimes used. The Kalandars deny any injuries take place to the sensitive muzzle of the sloth bear or that the long lips are torn or injured, during this process.

The cubs (17) and juveniles (7) examined by us while administering questionnaires, either still had their milk canines or had already had them removed so that only the cavity left behind in the mouth could be observed. We have not been able to witness a canine removal first hand but have examined the cubs soon after the canines have been knocked out and the distress and physical trauma to the cub was apparent. The teeth are used for talismans and amulets and command a good price. However the Kalandar claims he removes them for the safety of his family, the public, and the crowds that gather around the dancing bear and not for its monetary value. However the investigators noted several juveniles with their canines intact. These were to be removed later when the teeth were larger and had more value as amulets; thereby being a more painful experience for the animals.

6.5 Trimming of Claws:

By and large the cutting of the claws takes place twice a year during Diwali and during Holi; or during spring and autumn so to say, according to the Kalandars. However it was observed that only 20% of the bears had one or two claws removed at the very base. Pulling out of claws is not a practice among the Kalandars and the investigators did not come across any case of claws being pulled out. However among the claws on sale some showed bone and a large part of the phalange attached. According to the Kalandars these were removed from a dead Sloth bear, by an owner who was desperate for money or had a family crisis to handle as once again violating the body of the dead bear was against their "religion."

In case of a good enough price paid by a client who urgently needs the claw as a talisman or by foreign buyers who pay well, the Kalandar supplies it without qualms, out of season. The claws are cut using brass or iron Sarotas (betel nut crackers). At several of the villages when the owner and trainer or other bear owners surrounded the bear to demonstrate a point to the investigators, the unrest and fear of the animal was very evident. The Kalandars explained the bears fear the group is going to cut its nails or change its nose rope both of which were obviously traumatic memories for the adult bear. Although safety was quoted as the reason for clipping the nails, and the comfort of the bear while walking on the paved roads was the second reason given for trimming its claws, profit was certainly the strongest incentive, as bear claws were in great demand by the bear audiences, whether rural, urban, or foreign. Hence the Kalandars trim the claws seasonally and do not remove them (by pulling out) as they provide recurring income.

6.6 Diseases and Treatment:

According to the Kalandar the cub or juvenile bear suffers no illness beyond a form of epileptic fits which attack it before the age of three years. Should the bear survive beyond this age it usually lives out its normal life span till thirty years. However as said earlier, our questionnaires elicited the information that the oldest bears were approximately 15-16 years of age and only 10% reached this age. However wildlife field workers conjecture the cause of death in the bears is often respiratory congestion, and two cases of post-mortem conducted in Karnataka, Bangalore, by Mr Srinath of the WWF revealed tuberculosis as the cause of death. However no documentation has been done in this area nor have any scientific studies been undertaken on this subject.

Only 10% of the Kalandars questioned had visited a veterinary doctor to consult about an illness of their bear; almost unanimously they preferred to go to a village elder for treatment. This "epileptic fit" is characterised by the bear becoming dull and listless for a few days; his face swells up and he refuses food; then suddenly he convulses and falls down usually to never recover. The Kalandars are very fatalistic about this illness. Zoo authorities hazarded a diagnosis: acute worm infection followed by a cardiac arrest. The investigators did not see any animal with these symptoms. A request has been made to bring the bear in for a post-mortem should any such death take place in the villages visited.

However the investigators did see two adult bears that were very sick and after showing symptoms of respiratory congestion they passed away. Three cubs handled by the investigators died of severe gastro-enteric symptoms. We were told a large number of cubs, almost 60 - 70% of those purchased died of similar symptoms. We conclude poor unhygienic feeding after acquiring the cubs is responsible for this high mortality rate. Respiratory and intestinal infections seem to be responsible for most of the deaths.

6.7 Mortality Rates:

The questionnaire revealed that the cubs have a high mortality rate at the market itself; approximately two cubs out of ten succumb to the shock of separation from the mother and simply "fade" away according to the Kalandars. The Kalandar trader or middleman who handles the purchasing for their fellow Kalandars reports that the initial trauma of the capture tended to increase the death rate but could not hazard the percentage of cub deaths.

Should the cubs survive, transportation takes its toll as the cubs are carried long distances in gunny sacking; or put into fruit baskets covered with leaves / fruits; or packed with hay in crates. The preferred mode of transport is trucks which obligingly carry the Kalandars through the length of this country. Today travelling by train has become a hazard the Kalandars claim, as the authorities and fellow passengers often object or ask too many questions should they recognize the animal. Again transportation entails a twenty to forty percent loss in cubs.

Should the cub reach the village and its owner safely, the first fifteen days are critical as it must accept the Kalandar owner and begin eating. The Kalandars conjecture 1-2 cubs out of 15-20 brought to a village each season die at this stage of handling. In the second year of the study the investigators had an opportunity to countercheck these statistics. In BV7 and BV8, 21 cubs were received. Over a period of three months the investigators observed three deaths of cubs due to respiratory and intestinal disorders. At the end of this three month period when the cubs were approximately five months old, the investigators found only five cubs continued to be with the Kalandars in these two villages. The investigators were told the cubs had all "died". This either leaves us staring at an extremely low survival rate close to only 24 % as in this particular case or the cubs had been sold through a route as yet not known to the investigators.

Although the Kalandars almost uniformly insisted their training methods produce no trauma with consequent fatalities, they do agree that the percentage of bears lost in the first year can be as high as 40%, with improved chances of the bear cub surviving as it becomes a juvenile. If the bear survives its third year without succumbing to "epileptic fits" the Kalandar feels it usually lives on for 15-20 years more.

It is estimated from the Kalandar questionnaires then, that on an average the larger villages (BV7, BV8, BV15, BV 21, BV24,) receive at least 15-20 cubs each season and these are distributed to the smaller Kalandar settlements. A settlement as large as BV13 could receive up to 25 - 30 bear cubs in a season. In Karnataka on an average 9 -11 cubs are needed to replace those lost each year among the 63 families licensed to dance bears, (Srinath, WWF). In this small sampling of Kalandar settlements, it is estimated that approximately 115 cubs reach the 36 villages each season. Of these in the first six months over fifty percent are lost to disease, trauma and poor feeding.

Since there is no valid licensing system at present in India, and since no statistics are available of poached bears / cubs with the wildlife functionaries, the estimated population of dancing bears is being conservatively calculated from the administration of the Survey Questionnaire given to the Kalandar. It must be noted that the present sub-group examined in North India

and in Karnataka has indicated that almost as many more Kalandar settlements exist through the States of Orissa, Bihar, Gujarat, Maharashtra, Tamilnadu and Punjab. This significantly increases the number of captured cubs per season.

7. Training of the Bear Cub

7.1 Training Methods:

From the Survey Questionnaire administered to the Kalandar community, by and large the preference is for the Kalandar owner to train his dancing bear himself. However the three trainers interviewed stressed that their services are often needed along with the owners efforts. Only the Kalandars train bears. The investigators were not able to trace any formal school for training of cubs. Several of the villages such as BV4, BV7, BV8, enjoy the reputation of having good owner-trainers. The training takes 6 months to two years to complete and the bear cubs are usually 4-6 months old when the training commences.

Although the Kalandar claims it is the first fifteen days when he feeds the cub himself and keeps it all the time in his company that cements a man-bear bond; and that bond the Kalandar claims is the basis for successful training, in reality the training process begins with the nose piercing of the cub. Once the rope is put through the tender nose the cub will do anything to protect itself from the pain caused by the tugging of the rope. At first the cub is "walked" behind the owner in circles and the period of time is increased till it is "walking" several hours a day, obediently, without pulling or misbehaving. The Kalandar claims the cub does this because of its intimacy with the owner but in reality the incentive is pain. To avoid the lacerations to its nose tissue it follows the owner. Next the cub is taught to rise on its hind legs and stay there or "dance" from one foot to the other.

Again this is done by the trainer twisting the rope, simultaneously pulling it up, so that the squealing cub quickly pulls itself up to reduce the pressure on its muzzle. The stick is hit on its foot and it automatically lifts it to avoid the blow; eventually the tapping of the stick on the ground is enough to make it move from one foot to the other. Often it claws at its nose too and in this manner it automatically learns to rise and pat its nose when the stick is waved before it. The investigators noticed in the three training sessions they attended that the stick and the rope were mainly used together to train the animal; fear of the stick and pain from the nose - rope discipline the cub. The few commands thrown in are merely its generic name said in a stern tone. Blows from the stick teach it to shake his head, lift its paws in the air, lie down and shake its hips. A light tap on the painfully swollen nose will teach it to "fold" its paws in a "namaste".

The Kalandar claims their training is based on the bear cub's dependency on them as surrogate mothers. This is impossible to accept. 7% emphasized the creation of a bond between the owner and the bear was as valid as the one between man and dog; and it was observed that perhaps in 30% of the cases examined an affectionate bond did exist between the adult bears and their owners. This in no way detracts from the utter callousness of the nose piercing, the tethering and the use of the stick and rope, which are their training tools.

By and large the training is done with this logic in the Kalandar's mind that the bear is a large, heavy and powerful animal; and unless it fears its owner and is disciplined frequently, it will be out of control. During this investigation we observed the bears being hit across the face with ropes and the bearman's stick. We also saw fresh nose re-piercing done to bears merely so that the renewal of pain could assist control of ill tempered bears.

Kalandars claim to feed cereals, fruits, honey and jaggery to their bears during the training, but in actuality right through the investigation we only saw Wheat Rotis being fed, even the milk they claim to give adults was not seen. So too in the South, steamed Ragi balls without the milk were fed. To the question why the diet could not be improved, the experienced elders, the Kalandars involved in the training, as well as the three trainers replied, that a "natural" diet would "excite" the bear; that their forefathers gave it the food of a man rather than the animal's own diet, so that it could learn to live with men more easily. In short, food and hunger, are also the Kalandar's methods of control.

The entire process of buying a cub, transporting it, collecting permits from the police and municipalities, feeding and training a cub for its first one year, costs the Kalandar approximately Rs 25,000.00 according to them. Hence a good-natured, well trained animal costs around that amount if is has to be resold as a juvenile.

7.2 Injuries and Deaths during the Training process:

During this investigation the Survey Questionnaire revealed a large number of Kalandars are also injured in the process of training and dancing their bears. A few stories circulate in each village of how a bear turns on its master and uses its claws to good effect. However only 5% of the bears examined actually showed a fierce temperament. Although the Kalandars had tales to tell of the ferocity of the female and her irritability when she is on heat, the bears which had wounded their owners were both males and females.

At least 30% of the bears examined bore scars of injuries and wounds around their face and muzzle or had injuries on their paw pads and ears. Although the Kalandars at first denied any bear dies in the training process and that any bear remains untrained and is recalcitrant, the Questionnaires revealed at least 20% cubs succumbed to the stress of the training process if not more. At least another 20% cannot be trained and are probably sold to circuses or travelling menageries although this information comes to us from the survey of circuses conducted by another NGO; and the Kalandars by and large insisted they sell only to another Kalandar so that the bear can adjust easily.

The disposal of the dead bear, assuming a small percentage die of old age, and the majority due to injuries and illnesses, continues to be a grey area. According to the Survey Questionnaire, without exception the Kalandars state they bury the dead animal without using / selling any of its parts. The three carcasses we dug up and examined in Orissa had

teeth, claws and pelt intact. The investigators were not shown any burial grounds although the Kalandars spoke of the "holiness" of the bear which has to be buried with the same rituals as a man is buried. The elders specially spoke of the power of the bear's pelt and how each part of the bear was full of healing powers. To the question whether these could be utilised, now that the animal was dead, the Kalandars professed deep dismay and said their bears are buried untouched. However the investigators were also told that they often cut or remove the claws from the dead bear or removed hair for amulets before the body is buried. No evidence could be found presently of a trade in other parts of the bear.

8. The Dancing Bear on the road.

8.1 Physical Hazards during road performances to bear and owner:

The Kalandar travels 8 to 9 months of the year and comes back to his village and community during the Festivals of Moharram and Ramzan and at Diwali as the firecrackers and celebrations disturb their bears a great deal. If the Kalandar villages are close to tourist frequented sights, the bear is not walked great distances during the three - four tourist months of winter. However the rest of the year the Kalandar walks through villages and towns, covering as much as 20-30 kilometers on foot and by hitching rides with truck drivers who charge Rs 25 to Rs 100 per ride.

The Kalandars travel during summers to Nepal, Jammu and Kashmir and Himachal Pradesh and the higher, cooler regions of Uttar Pradesh. During the winters they stay in the plains of the States of Uttar Pradesh, Haryana, Punjab, Delhi and Rajasthan. Thus all the borders of India are easily accessible to them. The physical strain on the man and bear is considerable during these walks and there are no fixed resting points for the Kalandars as they wander. Usually they travel in small groups and in the last five years the Kalandars of North India take great care not to get separated from clan members on the road due to increasing harassment from the forest officials and policemen.

In Karnataka the climate is equitable and the Kalandar is even more nomadic by nature, walking through the provinces in the State, touching on one place only once a year. Their main villages are very much in the interior of the State and the whole community meets for Moharram and Id. They rest two months in the year at the time of these festivals. Here too the Kalandar walks or hitches rides with friendly truck drivers for a nominal price. The authorities are much more relaxed about licensing and regulations in the South and hence the Kalandars of Karnataka were not that perturbed about being harassed by policemen, forest officials, animal welfare workers or municipal authorities. Throughout Karnataka there is still enough open space, large fields and camping grounds that can be used by the Kalandars for camping. By contrast, the Kalandars of North India find confrontation with authorities, such as the police, the municipalities, forest officers and wildlife welfare workers is increasing.

Kalandars on the road in North India also face droughts, floods, rains, extreme heat and cold. During the last five years escalating costs of living have meant the normally generous villager is more niggardly about giving them wheat, maize, corn and lentils as their earnings. During the first year of this investigation it was noted the monsoons and copious floods had ruined all seasonal crops and hence the Kalandars had received very little of the cereals needed. So too the increased seizures of bears by forest authorities, has meant the Kalandars travel less and more cautiously, off the beaten paths of large cities and towns, and consequently their earnings are less than before. There is no form of medical aid for man or bear on the road and in the last nine months there has been an increase in road accidents, heightening the Kalandars' insecurity. While administering the questionnaire it was seen that the owners of all the bears out dancing chose short routes, bringing them back home in a fortnight, unlike their earlier practice of continuously roaming for months before returning home.

8.2 The routes chosen:

These are determined by the earning potential and vary according to temple celebrations, festivals, village fairs, and market days along a certain route. While administering this questionnaire and moving with the Kalandars their popularity during the festival of Raksha Bandhan could be observed. Each observed bear and owner worked at least 12 hours on that day without a break, and the Kalandars selling hair amulets and claw talismans were in great demand. The Kalandars unerringly waited near the temples most popular with the public or at markets where the crowds would come. The next day they moved on to a village animal market and thence to a wholesale market where harvested grains were coming in to be sold. In this brief interaction the investigators noted the increased stress on the bears which did not react well to crowds pressing in on them, as well as their distress due to the missing meals, and total absence of water and rest. However in the next two days the Kalandars and their bears had relatively few customers and did not make much income.

9. Licensing and the Law.

9.1 WildLife Protection Act, 1972, (with amendments.)

This Act is a national law and is applicable to all States except Jammu and Kashmir. State governments may not amend or change this national law. The Wildlife Protection Act, 1972, was designed "to afford protection to certain species of wildlife as were from time to time included in the various Schedules of the Act."

According to Chapter V of this Act, if any animal listed on Schedule I or II, is held captive by any individual, it should first be declared to the Chief Wildlife Warden under Section 41.1. The Chief Wildlife Warden may "for the purposes of Sec.40, issue a certificate of ownership in such form as maybe prescribed, to any person who is, in his opinion, in lawful possession of any wild animal...." However Section 43 regulates the transfer of the animal and says such a Certificate may be given on the condition the captive animal is neither sold nor gifted nor used to make into animal articles, or trophies. It also forbids the transfer of the animal from State to State without the previously acquired permission of the Chief wildlife warden. Each time the animal changes hands "a fresh certificate of ownership" has to be executed. So too Sec.44 refers to those dealing in animals and says a dealer's license is needed before he trades in animals. Also the law makes proviso for the fact that no license may be granted unless the Chief Wildlife Warden or authorized officer has studied "the implication which the grant of such a license would have on the status of wildlife..." Lastly the license will be "valid for one year from the date of its grant; not be transferable; and be renewable for a period not exceeding one year at a time." Under the law as stated in Chapter V, the person holding captive a Schedule I animal can be imprisoned or / and fined; the animal can be seized and removed from his possession; "cancellation of license or permit" shall be in addition to the above punishments.

Over the last one and a half years of this investigation eight such seizures had taken place along the route the investigators had visited. The affected Kalandars were interviewed and questionnaires administered. In all but two cases the bears were kept in zoos and died within a few months of being confiscated. The two bears were returned to their owners. One continues to live at Jaipur Zoo under distressingly miserable conditions. These episodes have made the Kalandar question the validity of a law which discriminates against their use of the bear in an age old tradition: but still permits circuses, private menageries and zoos to keep these animals in worse conditions and without any strict policing.

It must also be emphasized that in spite of the existence of these laws the capture and trade of bears as well as other forms of wildlife goes on at well known animal markets and fairs in India.

The Kalandars for a long time plied their trade without licenses although the Law making it

mandatory for them to have a license was passed in 1972. The licenses issued to the Kalandars and examined by us numbered close to 115. By and large, they were all dated between 1979 to 1992. No licenses were to be issued after 1992 allowing the acquisition / possession of a dancing bear. The Himalayan Black Bear, the Sun Bear, and the Sloth Bear have all been placed on Schedule 1 as highly vulnerable species. Any trade in their parts is forbidden. Any buying and selling of them for entertainment and for use as private pets is forbidden. Hence the issue of fresh Licenses to the Kalandars to dance these bears was also forbidden. Neither were renewals granted for old Licenses previously issued. The Kalandars continue to dance the bears on their old licenses although renewal has not been granted after 1992.

9.2 State Laws / Municipality / Forest Officers/ Police:

Sample licenses have been attached in the Appendices. It will be noted that the Kalandar not only gets a letter / permit to dance his bear from the Assistant Conservator of Forests, but also applies to the municipality of the city / town he resides in, to the effect that he can use that animal to entertain and keep as a pet, and that it would in no way injure the health of the public. So too he has to register himself at the nearest police station where he receives a character certificate and a permit to dance his bear. In some States a forest officer can give these certificates. It is on the strength of these permits issued by local authorities that the Kalandar is still able to dance his bears. The Kalandar estimates he spends Rs 3000 approximately, in unrecorded payments, in order to get his permits.

There is no uniform format to the license. After examining over 115 licenses given by Assistant Conservators from over eight cities, one observes that each license is worded differently. Some licenses state the physical description of the bear, others specify the licensee cannot sell the animal or use its parts when dead.

The license issued by certain other States specify that the animal has to be fed, medicated and maintained with care or the licensee is liable to be prosecuted. Others quote the Wildlife Act Sec.40 but include no details of the animal for which the license was issued. Sometimes the license issued for a bear also permits the licensee to "entertain or dance" monkeys and "keep Deer etc." as "pets". There is no proper record with the functionaries who issued these licenses and therefore no estimate could be made of how many licenses have actually been issued over the last 24 years since this Wildlife Act came into force and for how many animals.

9.3 Confrontation between Bear owner and the Law:

The Kalandars are illiterate and without any formal schooling. As such the Survey Questionnaire revealed that the Kalandars were not aware of the Wildlife Act and the withdrawal of licenses, till 1993, when they were suddenly refused renewals of their licenses in certain States. Since then the harassment from the police and the municipality has increased because the Kalandars find they now have to pay higher amounts to renew their permits and escape from the clutches of the police and the forest department when caught on the road or in towns, while dancing their bears.

Interestingly, if a Kalandar settlement had a strong head / panch he could appeal to the local authorities and get renewed permits for his Kalandars to dance their bears within a designated area. This was the case with BV19, BV23 and BV24. In two other settlements influential businessmen and Owners of local hotels had requested the local authorities to permit a certain number of Kalandars to perform at their hotels to entertain their guests. This form of patronage also worked well but there was no way by which the Kalandar could avail of such protection while on the road. The Survey Questionnaire revealed that this increased policing by the forest officials, the police, and members of animal welfare organizations had severely cut into the Kalandar 's earnings.

From the cross sampling provided by the questionnaires, the Kalandars are aggressively hostile to a Law which they see as depriving them of a livelihood. This anger is aggravated by the insensitivity of a government which has failed to provide any of the basic human necessities to a reserved OBC group. They are open to any rehabilitation programme which replaces their earnings through their animals in a consistent and reliable fashion. Since the beginning of this two year long study the Kalandars have mobilised themselves into a highly aggressive and articulate group. They have formed their own society; learnt to use the press for effective exposure of their poverty; they led their clan on a mammoth Rally well covered by the media, where they presented the then Prime Minister, Mr. DeveGowda with a petition requesting he give them alternate means of livelihood before he snatched their bears away. They have learnt to hire lawyers to fight their cases in court when bears are confiscated. It must be emphasized the Kalandar is willing to change his profession if he receives some practical solution to his problems of unemployment, lack of housing and water, schooling and medical aid.

10. Bear Capture: Methods

10.1 Methods:

The Hunter / Trader questionnaire was administered in Phase II of the project. The investigators accompanied a small group of Kalandars when they went on a cub purchasing trip during the season, (November to mid March.)

For a complete understanding of the plight of the Sloth Bear in India today, it was vital that the local populace, the tribals, the forest guards and wildlife authorities also be interviewed and their attitudes to this trade be assessed. They were questioned for additional information on trade routes, bear markets, transportation methods, and in order to gain information on the degree of abuse involved at each stage.

The Survey Questionnaire given to the Kalandars had provided some data about methods of capturing cubs and the attitudes of the local people to the cruelties involved in this trapping. The Survey estimated that 80% of the Kalandars interviewed had never visited the bear capture areas or involved themselves in the actual trapping or hunting of the cubs. Their role was only to train and dance the bears. The remaining 20% usually in the older age group had gone to the "dangs" or forests for purchasing bear cubs. As such their knowledge of the capture methods is hearsay in most cases.

However by accompanying them on one such trip allowed the investigators, to meet the tribals, such as Gonds and Bhils, who are involved in the actual trapping, and talk to them. There was no question of administering questionnaires to them.

A few of the Forest tribes or adivasis are the poachers. They have lived all their lives in the jungles and are adept at studying animal signs and tracks. They are aware of bear behaviour and get alerted to a female in heat. Once such a female is identified they keep track of her movements and behaviour patterns through mating / pregnancy and finally until the female bear drops her cubs. Being adept at jungle lore they are able to identify the den / cave the pregnant female is using currently. She does emerge from the cave after about two or three weeks to forage for food for a few hours in the night or in the early hours of dawn.

The tribals keep a constant check on this female and her routine foraging period. They ideally prefer to remove the cubs when the cubs are 3-5 weeks old. A small group of 6-7 poachers camp on a ledge overhanging the bear's denning cave; or seek a vantage point from where they can observe her without her sensing their presence. They wait till she leaves her cave usually between late dusk and dawn for about two to four hours. When the mother is out a few members jump down and gather dry leaf litter in a heap at the entrance of the cave. This heap is designed to be in the way of the female bear on her return path to her cave.

This heap is set fire to and while the fire is burning two other members enter the cave, after checking the cave is free of danger as the mother often returns by another possible entrance sensing a threat to her cubs. This check consists of throwing a few rocks into the cave. The result of this check could be silence in which case it is safe to enter the cave, or an angry animal charging out at them, in which case their skill at climbing trees would come in handy.

They enter the cave with a flaming torch (wooden handle wrapped with a rag soaked in kerosene). This helps them find their way around the cave in the dark. Sloth bears usually choose caves for delivering the cubs with extreme care. Caves with two or more rooms are preferred, especially in areas of competition from other predators like hyenas, leopards etc which could prey on the young cubs. The inner most room is generally like a well and deep enough to make access difficult. She herself goes through a great deal of discomfort to reach the cubs. This is to ensure that the cubs do not stray out of the cave or away from their den, while the mother is foraging for food. This makes the poaching of the cubs an even more Herculean task. The above process i.e. poaching is completed at record speed, as they are too scared of the wrath of the returning mother. Two members of the poaching team are constantly on the look out. Once the cubs are found and brought out of the caves, in a gunny sack, they are again transported to the next destination, which would be the Kalandar customer camping on the edge of the forest or an animal dealer procuring the animals for a zoo / circus; or "private dealers for foreigners".

The Kalandar Survey revealed the biggest danger during trapping cubs is the Sloth bear Mother herself with her ferocious tendency to protect her young (Dr. Shankar, Wildlife Institute, Dehradun). This was confirmed by the tribal trappers. If it is possible to enter the den when the mother is foraging and throw a gunny sack over the cubs and carry them away then that is done. While the Kalandars had stated the mother bear is distracted by guns being shot overhead or firecrackers, this information seemed dubious because the possession of firearms and firecrackers in sanctuaries and national parks is a very serious offence, and the trapping of cubs could also involve at times, the killing of the mother bear and disposal of her carcass.

Upon questioning the forest tribes we were told they avoid such tactics because they do not wish to draw the attention of the forest guards; secondly where bear cub poaching is specifically concerned, the Sloth Bear seems a short-sighted animal and it attacks only when too close to a human being it has surprised, out of fear and shock. It prefers to avoid encounters with humans therefore they too prefer to avoid confronting the female sloth bear. In our dialogue with the trappers, and tribals they emphasized that a higher percentage of bear - man encounters are now taking place because of a steady increasing encroachment into the reserved forests by human activities (timber felling). Poaching however contributes to this disturbance in no small measure.

In numerous States, (U.P. and Himachal for example,) farmers are allowed to carry firearms and frequent raids on the crops by a bear leads to the farmer shooting the animal and keeping the pelt or selling it to a local trader. If later any cubs are found, Kalandars wandering in that area are informed and the cub is purchased by them. This is yet another way in which cubs enter the market but again no detailed studies are available in this area.

10.2 Sources / Locations:

The forested areas of Uttar Pradesh specially near the border of Nepal, the forested areas of Orissa, Madhya Pradesh and Karnataka are suspected areas of Capture. Members of the Bhil and Gond tribes; and branches of the Saharia tribe exist in each state who not only excel at trapping but are very quick in reaching their customer.

10.3 Transportation / Estimated number of cubs:

The preferred mode of transportation for bringing the cub from the capture area to the market is on foot. The Adivasi tribal never moves far from the forest edges. The cubs are carried to the waiting customer in gunny sacks, cloth bags, cane baskets, singly or in pairs. The cubs during this purchasing trip were 4-5 weeks old. The investigators moved to seven locations each about 5-8 kilometers from each other, purchasing the cubs. During this period the Kalandars camped outside the peripheries of the forest but took care to shift camp frequently. At each point several Kalandars enter the jungle to inform the tribals of their need for cubs. We were fortunate to purchase the cubs in a short time otherwise the Kalandars could need up to two or three months to complete their purchases.

At two points we met Kalandars from Bihar, Orissa, Jhansi and Varanasi who were also purchasing cubs. These were brought to them by middlemen / traders who had already made the initial purchase. The trader too moves by road to his main market / selling points. This meeting was arranged in an open field and the investigators were invited to join in the bargaining. The cubs were skillfully camouflaged in wooden crates filled with hay. Otherwise the Kalandars, buyers and sellers camped in the open air with their womenfolk and children. The cubs were displayed to the buyers who also fed them and handled them to check their health.

At another point we stopped to question a small group of Kalandar families who had a more permanent settlement near the forest. They apparently purchased cubs only to resell them to other Kalandars and they had one huge golden Sloth Bear which they kept as a pet and several dancing bears. The investigators, along with the accompanying Kalandars used buses and autorickshaws, tongas and tractors during this part of the travelling or simply walked.

After the purchasing the Kalandars transport the cubs in any box, basket, or container which can seem like a piece of travelling baggage, often tied with cloth outside. They rarely attempt to feed the cubs en route for fear of detection. Our group packed the cubs into fruit crates

and covered them with hay. The heat thereby generated in the box was high and the cubs were quite limp and dehydrated by the time we arrived at Delhi. At no point did anyone check our baggage. On the two day return journey the cubs were fed only on the insistence of the investigators. Although the cubs mewled loudly on being touched and sucked at the milk bottle with sufficient noise, the apathetic fellow passengers assumed we were carrying pups and gave us no trouble.

Several of the Kalandars take the precaution to drug the cubs with "opium" or "Affim" so that the cubs do not feel hungry and squeal during transportation to far off places. The group of Kalandars we accompanied purchased six cubs, of which two died en route; a third succumbed to the stress and handling 24 hours later. Three went on to the Kalandar village but one more died within a week of arrival from continuous diarrhea. Only two survived transportation.

10.4 Reselling and trading:

As the cubs move to the Kalandar settlements the price of the cubs rise. Thus a cub which at source cost Rs 200 to Rs 600 (depending on sex, weight, and health) could be traded several times with the cost doubling at each change of hand. Traders at the various open air markets sold cubs for Rs 2000 to Rs 3000. The same cubs at a village outside Delhi cost Rs 6000 and three months later cost Rs 8000. At the end of ten or eleven months a young well grown bear costs Rs 12,000. A large amount of income is thus derived by Kalandar families simply from selling and reselling the cubs. The poorer Kalandar who has lost his bear and needs to buy another comes directly to the "dangs" or forests to avoid paying a higher price at the "markets".

10.5 The Bear Markets:

These are indicated on maps attached in the Appendices. Very little information is available on the population dynamics of the Sloth Bear in India. While the Kalandar questionnaire revealed that almost all the bearmen felt there had been a depletion in the number of bears, and a lesser number of bear cubs have come into the market over the last five years, a further study of the markets during several peak seasons would yield further factual data. This is again an area which has never been methodically studied.

10.6 Local Attitudes:

The Survey revealed 80% of the local populace are indifferent to the trapping and trading in bears. 10% positively liked the idea of this "nuisance" being taken care of and only another 10% were against the capture of the cubs specially since it could involve killing the mother bear or depriving it of a chance to rear its young. This 10% of the populace had not initiated any strong protests against the cruelties involved in the capture and transportation of bear cubs.

10.7 Impact of Poaching on the wild Sloth Bear population:

- a) Depletion of the wild Sloth Bear population: In view of the fact a sloth bear produces her litter of two cubs (on an average) only once in two or two and a half years and very often human intrusion can cause her to kill her own cubs, the Sloth Bear numbers are reducing quite fast. This slow reproductive rate of the Sloth Bear has important consequences in view of the uncontrolled poaching currently taking place.
- **b)** Increased man-bear conflicts: As we have mentioned earlier it is no coincidence that areas of heavy poaching are also marked by more savage and frequent man-bear conflicts.

10.8 Reasons for easy poaching:

The reasons have been listed below:

a) The government policy of allowing tribal settlements / villages to remain inside the core forest areas, sanctuaries, and national parks. This creates a situation which allows bear - man encounters. The subject is one which is currently generating a great deal of heat and discussion in India; namely a large school of thought would like to preserve tribal culture and their ancient knowledge eg. Of medicines and herbs and the investigators fully support this.

However the investigators also found an increasing commercialization of values amongst the tribals and this coupled with the conviction that the forest resources are theirs by traditional right is leading to an unhealthy situation. Our questioning of the tribals only affirmed that they did not feel poaching upset any ecological balances; they seemed sceptical that sloth bears and cubs could be endangered; the rapid depletion of a species was only viewed as a loss of income. The holistic respectful attitude one expects from a tribal culture that depends on the forest for a living, wasn't there.

Perhaps our investigation brought to the forefront only those engaged in poaching and trapping and hence is a biased statement. However the investigators still strongly feel settlements / villages / even those belonging to tribals, if allowed to exist inside the core forest areas do create problems. Fuel collection, cattle grazing, honey collection, fruit, flowers and leaves collection (which varies from state to state..) will go on. During our study, eleven villages in / around three forested areas were visited. These villages were chosen because several of the villagers had been victims of bear attacks. These encounters most of the time took place because the villager was in the forested areas, either cycling through, or hunting game, but he was where he shouldn't have been. The sloth bear taken by surprise has been known to run away, but if the human is just too close it rears up on its hind legs and slashes with its claws. Most of the injuries examined by us were by the bear mauling the villager with its claws and biting

it around the head region.

- **b**) Certain of the exploitative tribals find supplying the young of wild animals or birds (not only sloth bear cubs), a lucrative trade. In view of the fact the government has a protectionist policy towards the tribals it would perhaps concretize the government's intentions if practical vocational training was given to these tribes and jobs be provided to them. Another small example, cooking gas be provided free of cost or at nominal cost to prevent fuel forays into the forest. However in view of the ground realities one cannot fault the tribals for continuing with their old practices. At a few villages outside the MP forest areas, solar energy had been utilised to help the villagers cook and light their lamps. Apparently a storm knocked out some of the solar panels and since then no government agency has repaired / replaced the panels and the villagers are back to entering the forests to collect firewood. This serves as one example of why and how poaching becomes easy revenue and secondly explains why the tribal gives little credence to any official statements of assistance. When the protected tribals become suppliers to consumers outside, their existence inside protected areas starts endangering the very existence of the protected areas themselves.
- c) Poor infrastructure of the Forest Dept. and inadequate government support at the grass roots level to their forest patrolling staff. The Indian government has at all times considered Wildlife and its protection a low priority area. It is only in the last decade that scientific studies have been encouraged highlighting the incredibly rapid habitat destruction and large scale poaching that has been systematically creating problems. Dedicated Indian conservationists either suffer from the red tape of State and Central bureaucracy; from inadequate funding; inefficient use of existing funds; vested political interests that override conservation. More than that, time and again our survey revealed the forest guards are insufficiently paid, insufficiently armed or clad, insufficiently supplied vehicles and radio equipment; in short they are asked to do a superhuman task under the most archaic conditions with the most obsolete tools. This is a fair ground for the sowing of seeds of corruption.
- **d)** Last but not least, there has been very limited education of the public in the value of preserving our forest and animal wealth. It is not enough to target schoolchildren with ecological studies; they are not currently the source of our problems and we may not leave them a future to exercise their guardianship. The education of the rural and uneducated masses has to begin; not merely to eradicate the superstitions associated with the curative value of a hair of the sloth bear but on larger issues of being a customer for any kind of wildlife trade.

Conclusion

The Dancing Bear in India has a long tradition and was a popular form of entertainment for many years but today it is a dying occupation with no future and this has to be recognised by the Kalandars. It involves barbaric modes of capture and cruel methods of training and controlling an animal that was never meant to be domesticated. The demand for Sloth Bear Cubs for the Dancing Bear Trade is definitely reducing the population of Sloth Bears in the wild as well as contributing to the growing problem of aggressive man-bear encounters in areas of heavy poaching.

Over a single season Kalandars could buy and trade over 115 bear cubs to be trained for dancing or for selling and to replace those lost in the previous year to illness, old age and accidents. This in turn implies a large number of adult breeding female sloth bears have been disturbed or killed in order to obtain these cubs. It is a depletion of wildlife resources India cannot afford.

The methods of training the bear cub are inhumane and lead to prolonged agony over 12 months for the young cub. The vicious practice of nose piercing, the trauma of nail clipping and dietary deprivation, and the use of a stick and rope to inflict pain on the animal during training cannot be condoned. The stress and pain the dancing bear endures on the road amidst traffic and pollution when danced in cities and towns, is condemnable. When young children see the bear dance in markets, at fairs and festivals, they often tease and poke the animal, seeing it as an object of fun and entertainment. The dignity and beauty the animal has in the wild is lost, and the child is educated instead in insensitivity and a lack of concern for the wildlife around him.

The study indicated that the Indian public still has to be educated in the cruelties involved in bear capturing. The superstitions regarding the exorcising powers of the bear, the belief that a claw or a hair can stave off danger has to be educated out of the Indian mind. A growing percentage of urban audiences dislike watching this shambling, large bear being made a clown of, in the Indian market or along the Indian roads, but are unaware of the cruelties involved. Villagers and tribals settled near the forested areas are indifferent to the consequences of bear cub poaching and regard the Sloth bear as either "vermin" that destroys their crops; or as a "competitor" for forest resources such as honey; or a dangerous "problem" to be encountered when they enter the forest surreptitiously.

The Wildlife Protection Act clearly states that the capture, transportation and selling or buying of a Schedule I animal is forbidden. The Prevention of Cruelty to Animals Act clearly condemns the training methods as cruel and inhumane. Utilising both these laws the tradition of the Dancing Bear of India should be phased out and the trade urgently needs to be stopped at its source i.e. the forest itself where the animal is first hunted and caught. The investigators also concluded there has been a steady decline in the numbers of bears being owned and danced by the Kalandars. The reasons were several. The increasing pace of life and variety of entertainment available, (Television, radio, cinema), has made the dancing bear lose its entertainment value. The rising costs of maintaining this large animal has also discouraged many Kalandar families from pursuing this trade. The introduction of stringent amendments to the Wildlife Laws which prevented the renewal of licenses to dance bears and prevented the acquisition of new cubs has opened the way to increased harassment from the forest officials and police officers. The Kalandar is thus ready to accept any alternate professions that guarantee a livelihood.

The investigators concluded the Kalandars (under 30 age group) would like another safer and securer mode of earning a living. The older Kalandars are still fiercely attached to their traditions and suggested a "theatre" be founded for the Kalandar arts where they could use the bears in their possession to "stage shows". However the Kalandar youth largely unemployed (age group 18 - 25) had already taken their decision and were neither dancing bears nor monkeys. The Kalandar community is open to any programme for rehabilitation provided they have faith in the organization or authority running the programme.

About 48 million forest dwellers live in India, within or in the vicinity of forests, forests that represent a means of survival and livelihood to them. (Mark Poffenberger and KC Malhotra, "Population and forest resource dependency") Poffenberger and Malhotra emphasize the tribals resentment at being denied access to reserved forests and that this resentment increases should a wild animal (eg the Sloth Bear) harm them or their crops. The investigators however do not find a correlation between this resentment and the active poaching of not only bear cubs but other wildlife as a means of sustenance. Utilisation of forest resources for survival by tribals, unfortunately, often becomes unregulated or unsustainable exploitation of forest resources.

Recommendations

To solve the problem of Dancing Bears in India requires a well considered pragmatic approach. The community that dances the bear needs to be rehabilitated along with the animal. The Kalandar should be given vocational training and taught other trades to replace this mode of earning. The community has indicated a willingness to change, and would like the government to assist them by supplying their basic needs for water, medical aid and employment. The Kalandars have received OBC status but the government has failed to give them any form of assistance.

The Wildlife Act was suddenly enforced in 1992 and the Kalandars were not granted any more licenses to dance bears which gave a collective shock to the Kalandar community. This was compounded by the Law insisting that licenses previously issued were "withdrawn", in the sense, it did not give the Kalandars permission to dance the bears they already owned. This then renders the Kalandar homeless and without any means of supporting his family. The indiscriminate seizure of dancing bears will only lead to further alienation of the Kalandars who are a large community living in abject poverty and disease. It will have the consequence of increasing pressures on poaching as the Kalandar with no alternate means of support will either purchase more cubs and hide them better from enforcement agencies, thus depleting the wild Sloth Bear population still further; or he will turn to wider use of the other species of wild animals of which he has adequate knowledge.

We ideally recommend a programme that gives the Kalandar time to find other means of livelihood while still dancing the bears which are already trained and in his possession. In a country where unemployment, even educated unemployment is high, finding jobs is not easy and the government's assistance will be strongly required. The Kalandar has to be educated that this "entertainment" is based on depriving a wild animal of a chance to lead a free and full life in its natural habitat.

We would therefore strongly suggest a gradual and intelligent phasing out of the Dancing Bear tradition. The Kalandar panchayat should be informed that they have been given limited time to dance the bears in their possession and that any acquisition of new cubs would lead to strong law enforcement. We suggest the Kalandar be explained that they are being allowed to dance their bears only on the condition there be no further acquisition of bear cubs.

We suggest the Law be strictly enforced in the matter of Poaching, buying and selling of Bears. We suggest that strong punitive measures be taken against any Kalandar who acquires new cubs or assists in the sale or trade of cubs. Contravention of this will lead to the immediate confiscation of the Kalandar's present animal(s) and his license to dance bears. In this manner the Bear Dancing trade can be phased out. This will also prevent further poaching of the cubs from the already depleted wild population. The government agencies such as the forest department must be given adequate support, in terms of funds and equipment, to enforce the law and carry out effective protection of the forest resources and wildlife.

We also recommend we register the estimated 1000 - 1200 dancing bears of India within a certain period of one year. We recommend the Kalandar be allowed to dance his bear only if it is registered. Registration of bears can be easily accomplished by tattooing or by other methods available. This will give us as accurate a picture as possible of the number of Sloth Bears in captivity.

Once registered, these animals could be regularly monitored through agencies / NGOs that could give medical aid and treat the animals if unwell or injured. This would allow us to deliver a warning or eventually confiscate an animal that shows signs of neglect or persistent ill treatment.

WSPA will design and construct a "Care for Life Bear Rescue Home" on an appropriate piece of land given by the Ministry of Environment and Forests through any State government / Conservator of Forests. This will help us to house confiscated bear cubs, old and ill animals, and those taken away because of ill treatment by the owner.

WSPA is also willing to train husbandry and veterinary staff in the day to day management of this facility. Some Kalandars could be gainfully employed in the construction and management of the bear sanctuary. After an interim period WSPA will hand over the facility to the Indian government but continue to play an active role in the long term management of the facility.

WSPA will also collaborate with the Ministry and NGOs in launching a public awareness and education campaign to help eradicate the superstitions associated with the amulets / talismans made of bear hair, claws and teeth. The Indian public should be aware of the trauma of cub capture and transportation; and of the reality which lies behind the training of the animal.

The Wildlife Act of India has adequate provision for penalising the poaching and trading community. These Laws must be strictly enforced to prevent the flourishing of animal markets and thus make it progressively difficult for the cub to reach the Kalandar or any other customer for the Sloth Bear. The tribal poacher, like the Kalandar, has to be educated and vocationally trained, so that they can earn a living by some other means. Education, Rehabilitation and Legislation need to go hand in hand to solve the issue of the Dancing Bears in India.